

Description

UPPER ARM PROTECTION SHOULDER PAD ACCESSORY

CROSS REFERENCE TO RELATED APPLICATIONS THIS APPLICATION IS A NONPROVISIONAL APPLICATION FOR THE SUBJECT MATTER DISCLOSED BY MY PROVISIONAL APPLICATION 60/411,173, FILED SEPT. 17, 2002.

[0001]

BACKGROUND OF INVENTION

[0002] The present invention relates to orthopedics. More particularly, the invention relates to an orthopedic device which protects the wearer from injury while participating in an athletic event.

[0003] Contact sports like football involve varying degrees of intentional contact between players, and thus often require protective pads to be positioned and located on various parts of the body to protect the player from such contact. In football , players typically wear shoulder pads and hip pads, and the like, positioned under the uniform. More recently, football players wear elbow pads, forearm pads,

and even hand pads. However there is a paucity of protective padding for the arm (humerus) of football players. Typical arm pads are constructed of a tubular member, which is formed from an elastic material, and one or more pads, which are either positioned in a sleeve provided in the tubular member or attached to the outer surface of the tubular member. The arm pad, therefore, includes a padded portion which is somewhat inflexible due to the pad, and an elastic portion which stretches to permit the wearer of the pad to put the pad on the arm and to permit the wearer to a limited degree to bend his arms. Pads that are used to protect the humerus typically either (a) do not stay in place without taping, or (2) bump into the shoulder pad when the user raises his arm above the shoulder, thus limiting the range of motion. When worn on the player's arm, the padded portion is positioned outwardly with the elastic portion facing inward toward the user's body. Because pads for the upper arm do not stay in place or because they limit the range of motion, they are not often used. When a player carries the ball, his arm (humerus) is exposed and vulnerable to contact. Although padding for the upper arm is highly desirable to protect the player, especially younger players, from blows which are normally

associated with contact sports, players often forego wearing such protective gear because the padding for the upper arm does not stay in place and needs to be taped for each practice session or game, or because the pad blocks the full range of motion of the arm; or, if they do use protective pads, they are easily misplaced, especially by younger players. Consequently, there is a need for a protective sports pad which permits the wearer to quickly position and remove the pad, does not limit the range of arm motion, stays in place until it is no longer needed, and is not easily misplaced or lost. The present invention provides such a protective pad.

SUMMARY OF INVENTION

[0004] In general, the present invention provides a shoulder pad accessory arm pad, to protect an upper arm of a wearer from injury. The arm pad comprises (a) an elongated padded member defining first and second opposite ends, the padded member being constructed and arranged for disposal therein of the arm of the wearer, to protect the arm from injury; (b) means for attaching the first end of the padded member to a shoulder pad of the wearer, to secure the first end of the padded member to the shoulder of the wearer; and (c) means for attaching the second

end of the padded member to the arm of the wearer, to secure the padded member to the arm of the wearer.

BRIEF DESCRIPTION OF DRAWINGS

- [0005] *FIG. 1A* is a plan view, from below, of a shoulder-pad accessory for upper-arm protection, made in accordance with the principles of the present invention.
- [0006] *FIG. 1B* is a side view of the shoulder-pad accessory shown in *FIG. 1A*.
- [0007] *FIG. 2* is a plan view, from above, of the shoulder-pad accessory shown in *FIGS. 1A* and *1B*.
- [0008] *FIG. 3* is a schematic representation, from an anterior to a posterior view, showing the shoulder-pad accessory attached to a shoulder pad of a wearer.
- [0009] *FIG. 4* is a schematic representation, viewed from one side, showing the shoulder-pad accessory attached to the shoulder pad of the wearer.

DETAILED DESCRIPTION

- [0010] The present invention provides a sports pad. More particularly, the invention provides an upper-arm pad which can be attached to and detached from the shoulder pads worn by football players.
- [0011] More specifically, reference is made to *FIGS. 1* and *2*, in

which is shown a shoulder pad accessory arm pad, made in accordance with the principles of the present invention, and generally designated by the numeral 2.

[0012] The arm pad 2 comprises an elongated padded member 4 having a foam pad 6 disposed within and attached to a peripheral elastic envelope 8. The padded member 4 has first and second open ends 4a and 4b, respectively. Attachment means 8a and 8b are provided at the first and second ends 4a and 4b of the padded member 4. The attachment means 8a is beneficially an elastic band 8e or a belt-and-buckle 8f. The attachment means 8b is beneficially an elastic band 8e, a hook-and-loop fastener 8d on an elastic band 8c, or a belt-and-buckle 8f. As seen in FIG. 1B, the foam pad 6 is thinner at the first end 4a than at the second end 4b of the padded member 4, in order not to limit range of motion of the user's arm at the shoulder. The thickness of the foam pad 6 increases continuously from the first end 4a to the second end 4b of the padded member 4. The foam pad 6 may be single-layer or may comprise a plurality of layers. The padded member 4 is sized to extend over at least a substantial portion of the wearer's arm, and to accommodate arms from six to twenty-two inches in circumference. The first end 4a of

the padded member 4 is constructed and arranged to extend around the capulet of a shoulder pad of a football player, and the second end 4b of the padded member 4 is constructed and arranged to extend around the lower portion of the player's upper arm.

[0013] Reference is now made to *FIGS. 3 and 4*, in which the arm pad 2 is shown attached to a shoulder pad 9b. The first end 4a of the arm pad 2 is attached to a capulet 9a of the shoulder pad 9b of under a football jersey 9 by the attachment means 8a, and the second end 4b of the arm pad 2 is constructed and arranged for attachment to the arm of the wearer by the attachment means 8b. Preferably, the attachment means 8b comprises an elastic band 8c with hook-and-loop fasteners 8d attached thereto along the entire length of the band 8c, thereby enabling the arm pad 2 to accommodate arms from about six to about twenty-two inches in circumference. The arm pad 2 is preferably enclosed the envelope 8, which is beneficially an elastic tubular membrane, and the attachment means 8a and 8b may be sewn or stitched to the foam pad 6.

[0014] When fabricated and attached as described above, the arm pad 2 will remain in place and will not limit the effective range of motion of the upper arm. It will be apparent to

those skilled in the art that the present invention thus provides a solution to two important problems encountered in the prior art.

[0015] While certain embodiments and details have been described to illustrate the present invention, it will be apparent to those skilled in the art that many modifications are possible without departing from the basic concept and scope of the invention.